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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,580	05/03/2001	Fabio Longoni	P 280280 2990435US/VK/KP	6525
909	7590	11/30/2004	EXAMINER LEE, CHI HO A	
PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102			ART UNIT 2663	
DATE MAILED: 11/30/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/847,580

Applicant(s)

LONGONI ET AL.

Examiner

Andrew Lee

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-30 and 32-34 is/are rejected.
- 7) ☒ Claim(s) 15 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 12, 30, and 32 are objected to because of the following informalities:

Claim 1, line 11, "timing reference" should be –corresponding time reference– same for Claim 30, line 21 & claim 32, line 10. Appropriate correction is required.

Claim 12, line 2, it should be "using".

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6-14, 20-29, 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As recited in Claim 6, line 5, it is unclear what is meant by "substantially shorter than the duration of a typical connection". Applicant is requested to reference the specification so mete and bound can be determined. Same reasons for claim 31.

Claim 4 recites the limitation "the time" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the time" in line 3. There is insufficient antecedent basis for this limitation in the claim. Claims 13 & 14 depends on Claim 12.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, 12, 16-17, 30, 32-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Willars et al U.S. Patent Number 6,449,290.

Re Claims 1, 30, 32-34, fig. 1 teaches the synchronizing frames comprising a RNC (a first end node), MS (a second end node), and at least one BS (a middle node) wherein each node further comprising a timer (a corresponding timing reference). Fig. 5 teaches setting a timer variable and in Step 510 (See fig. 5) RNC sends a SFC "System frame counter" state (a connection specific timing reference) to its connected BSs (to all nodes involved in the connection). Step 520 teaches aligning each Local Frame counter (the timing reference) with the SFC (the connection specific timing reference) and Step 530 determining an offset at the BS (the middle node in question) that is used to compensate the difference between the timers (See col. 12, lines 8-30).

Re Claim 2, refer to Claim 1, wherein the align frame number is transmitted to the MS (the second end node).

Re Claim 3, refer to Claim 1, wherein during a handoff, the alignment is performed at least two base stations (a second middle node).

Re Claims 4, 5, refer to Claim 1, wherein each node inherently synchronizes their timing reference on the basis of a time when a predetermined message is sent between the end nodes to start a connection request or handoff request.

Re Claim 12, refer to Claim 1, wherein each BS receives the SFC (a connection specific timing reference) to compensate the LFC to determine a frame number to be transmitted to the MS (the second end node).

Re Claims 16, 17, refer to Claim 1, wherein the end nodes synchronize their timing references with the LFC (timing reference) in the BS involved with the connection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willars et al U.S. Patent Number 6,449,290.

Re Claim 18, fig. 5 teaches synchronizing asynchronous base stations (a middle node), wherein in this embodiment the RNC is the first end node and the second end node is the mobile station. Willars fails to explicitly teach that the first end node is a mobile station and the RNC is the second end node. However, one skilled in the art would have recognized that the connection between by MS (first end node) and the RNC (second end node) must be frame synchronized with the middle node. It would

not have matter whether the RNC or the MS, to be designated as first or second end nodes, as long as frame synchronization is performed between them. Hence, one skilled in the art would have been motivated to initiated frame synchronization from either end nodes.

Re Claim 19, Willars fails to explicitly teach that some frames comprise an indication on whether or not the frame in question comprises ciphered data. However, one skilled in the art would have been motivated to include ciphered data in some of frame for added security.

Allowable Subject Matter

8. Claims 6 and 31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claim 15 is objected to as being dependent upon a rejected base claim.

10. The following is a statement of reasons for the indication of allowable subject matter:

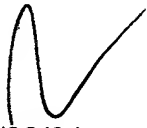
In combination with Claims 1 and 6; 30 and 31, prior art fails to the connection-specific timing reference comprises at the end nodes a connection specific frame number and a frame number extension which is stepped when the connection specific frame number completes one period.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 571-272-3130. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-571-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AI 
11/22/04 ANDY LEE
PATENT EXAMINER